Record Nr. UNINA9910807155603321 Plant transposons and genome dynamics in evolution / / editor, Nina V. **Titolo** Fedoroff Pubbl/distr/stampa Hoboken [N.J.], : Wiley-Blackwell, 2013 **ISBN** 1-118-50015-6 1-283-97781-8 1-118-50016-4 Edizione [1st ed.] Descrizione fisica 1 online resource (240 p.) Altri autori (Persone) FedoroffNina V <1942-> (Nina Vsevolod) Disciplina 581.3/5 Soggetti Plant genetics Plant genomes **Transposons** Plants - Evolution Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto The discovery of transposition / Nina V. Fedoroff -- A field guide to transposable elements / Alan H. Schulman and Thomas Wicker -- The mechanism of Ac/Ds transposition / Thomas Peterson and Jianbo Zhang -- McClintock and epigenetics / Nina V. Fedoroff -- Molecular mechanisms of transposon epigenetic regulation / Robert A. Martienssen and Vicki L. Chandler -- Transposons in plant gene regulation / Damon R. Lisch -- Imprinted gene expression and the contribution of transposable elements / Mary A. Gehring --Transposons and gene creation / Hugo K. Dooner and Clifford F. Weil -- Transposons in plant speciation / Avraham A. Levy -- Transposons, genomic shock and genome evolution / Nina V. Fedoroff and Jeffrey L. Bennetzen. Sommario/riassunto The transposable genetic elements, or transposons, as they are now known, have had a tumultuous history. Discovered in the mid-20th century by Barbara McClintock, they were initially received with puzzlement. When their genomic abundance began to be apparent, they were categorized as ""junk DNA"" and acquired the label of

parasites. Expanding understanding of gene and genome organization

has revealed the profound extent of their impact on both. Plant Transposons and Genome Dynamics in Evolution captures and distills the voluminous research literature on plant transposable elements and